AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A two-side image forming apparatus comprising:

a first sheet-transferring path, for use in one-side image formation, for transferring, to a printed sheet storage section via an image transcribing section, a sheet supplied from an unprinted sheet storage section;

a second sheet-transferring path, connected to the first sheet-transferring path, for supplying a turned-over one-side printed sheet to the image transcribing section,

an intermediate roller provided along the second sheet-transferring path; and

a resist roller for synchronizing a timing at which a sheet is transferred onto the first sheet-transferring path, wherein

the two-image forming apparatus is controlled such that a plurality of sheets are transferred concurrently in an overall sheet-transferring path when performing two-side image forming operation, the overall sheet-transferring path including the first sheet-transferring path and the second sheet-transferring path, and

a rotation of the intermediate roller is in synchronism with a resumption of rotation of the resist roller.

2. (Original) The two-side image forming apparatus as set forth in Claim 1, wherein:

the first sheet-transferring path includes switch-back means, located at an immediate upstream of the printed sheet storage section, the switch-back means transferring the one-side printed sheet to the second sheet-transferring path.

3. (Original) The two-side image forming apparatus as set forth in Claim 2, further comprising:

second sheet detection means in the second sheet-transferring path, the second sheet detection means for detecting the one-side printed sheet transferred into the second sheet-transferring path,

the two-side image forming apparatus (i) stopping the one-side printed sheet that is detected, when the second sheet detection means detects the one-side printed sheet, and (ii) resuming transfer of the one-side printed sheet in a predetermined timing.

4. (Previously Presented) A two-side image forming apparatus comprising:

a first sheet-transferring path, for use in one-side image formation, for transferring, to a printed sheet storage section via an image transcribing section, a sheet supplied from an unprinted sheet storage section;

a second sheet-transferring path, connected to the first sheet-transferring path, for supplying a turned-over one-side printed sheet to the image transcribing section,

an intermediate roller provided along the second sheet-transferring path; and

a resist roller for synchronizing a timing at which a sheet is transferred onto the first sheet-transferring path, wherein

the two-image forming apparatus is controlled such that a plurality of sheets are transferred concurrently in an overall sheet-transferring path when performing two-side image forming operation, the overall sheet-transferring path including the first sheet-transferring path and the second sheet-transferring path, and

a rotation of the intermediate roller is in synchronism with a resumption of rotation of the resist roller,

wherein the first sheet-transferring path includes switch-back means, located at an immediate upstream of the printed sheet storage section, the switch-back means transferring the one-side printed sheet to the second sheet-transferring path, wherein the resist roller, located at a crossing point between the second sheet-transferring path and that part of the first sheet-transferring path which is between the unprinted sheet storage section and the image transcribing section, adjusts a resuming timing for resuming the transfer of the sheet to the image transcribing section in order to adjust on which part of the sheet an image is to be transcribed by the image transcribing section.

5. (Original) The two-side image forming apparatus as set forth in Claim 1, wherein:

two sheets are transferred concurrently in the overall sheet-transferring path.

6. (Original) The two-side image forming apparatus as set forth in Claim 2, wherein:

the switch-back means reverses a transfer direction of a first sheet and transfers the first sheet into the second sheet-transferring path in a period in which a second sheet is supplied from the unprinted sheet storage section, the second sheet is transferred via the first transferring path, and a transfer direction of the second sheet is reversed, the second sheet being to be subjected to image processing after the first sheet.

7. (Original) The two-side image forming apparatus as set forth in Claim 6, wherein:

the switch-back means reverses the transfer direction of the second sheet and transfers the second sheet into the second sheet-transferring path, in a period in which the first sheet which has been printed on its one surface is transferred through the second sheet-transferring path, the first sheet is printed on its reverse surface in the first sheet-transferring path and then, the first sheet is transferred to the printed sheet storage section.

8. (Original) The two-side image forming apparatus as set forth in Claim 7, wherein:

a third sheet that is to be processed after the second sheet, is solely transferred in the overall sheet-transferring path, after the second sheet is transferred to the printed sheet storage section, the second sheet having been transferred into the second sheet-transferring path, and printed on its reverse surface in the first sheet-transferring path.

9. (Currently amended) The two-side image forming apparatus as set forth in Claim 4, wherein:

the second sheet detection means and the ~~PS roller~~ resist roller are located so that L1 < L2,

where L1 is a longest sheet length along the transferring direction the two-side image forming apparatus can deal with, and L2 is a distance from the second sheet detection means to the resist roller along the second sheet-transferring path.

10. (Previously Presented) The two-side image forming apparatus as set forth in Claim 4, wherein:

the resist roller and the switch-back means are so located that L1 < L3,

where L1 is a longest sheet length along the transferring direction the two-side image forming apparatus can deal with, and L3 is a distance from the resist roller to the switch-back means along the first sheet-transferring path.

11. (Previously Presented) The two-side image forming apparatus as set forth in Claim 4, wherein:

the first sheet-transferring path, the second sheet-transferring path, and the resist roller are so located that L1 < L4, where L1 is a longest sheet length along the transferring direction the two-side image forming apparatus can deal with, L4 is a distance, along the second sheet-transferring path, from (a) a crossing point between the second sheet-transferring path and the downstream part of the first sheet-transferring path with respect to the image transcribing section, to (b) the resist roller.

12. (Original) The two-side image forming apparatus as set forth in Claim 2, wherein:

in case where sheets in an even number are to be printed, the switch-back means performs, once or plural times, such (i) operation as to reverse a transfer direction of the first sheet and transfer the first sheet into the second sheet-transferring path, in a period in which the second sheet is supplied from the unprinted sheet storage section, the second sheet is transferred via the first sheet-transferring path and then a transfer direction of the second sheet is reversed by the switch-back means, and such (ii) operation as to reverse the transfer direction of the second sheet and transfer the second sheet into the second sheet-transferring path, in a period in which a

transfer direction of the first sheet is reversed, the first sheet is transferred through the second sheet transferring path, the first sheet is printed on its reverse surface in the first sheet-transferring path, and then the first sheet is transferred into the printed sheet storage section; and

in case where sheets in an odd number are to be printed, the switch-back means performs the operation once or plural times, and then a third sheet that is transferred after the second sheet is solely transferred in the overall sheet-transferring path.

13. (Previously Presented) A two-side image forming apparatus comprising:

a first sheet-transferring path, for use in one-side image formation, for transferring, to a printed sheet storage section via an image transcribing section, a sheet supplied from an unprinted sheet storage section;

a second sheet-transferring path, connected to the first sheet-transferring path, for supplying a turned-over one-side printed sheet to the image transcribing section,

an intermediate roller provided along the second sheet-transferring path; and

a resist roller for synchronizing a timing at which a sheet is transferred onto the first sheet-transferring path, wherein

the two-image forming apparatus is controlled such that a plurality of sheets are transferred concurrently in an overall sheet-transferring path when performing two-side image forming operation, the overall sheet-transferring path including the first sheet-transferring path and the second sheet-transferring path, and

a rotation of the intermediate roller is in synchronism with a resumption of rotation of the resist roller,

wherein the first sheet-transferring path includes switch-back means, located at an immediate upstream of the printed sheet storage section, the switch-back means transferring the one-side printed sheet to the second sheet-transferring path,

wherein the first sheet-transferring path, the second sheet-transferring path, and the switch-back means respectively include sheet transfer driving sections, which are independently driven by different driving sources.

14. (Currently amended) ~~he~~ The two-side image forming apparatus as set forth in Claim 13, further comprising:

first sheet detection means in the first-sheet-transferring path, first sheet detection means for detecting whether a sheet is present or absent;

second sheet detection means in the second sheet-transferring path, the second sheet detection means for detecting the one-side printed sheet transferred into the second sheet-transferring path; and

third sheet detection means near the switch-back means, the third sheet detection means for detecting whether a sheet is present or absent,

the sheet transfer driving sections of the first sheet-transferring path, the second sheet-transferring path, and the switch-back means being respectively driven in accordance with detection results of the first, second, and third sheet detection means.

15. (Currently amended) ~~he~~ The two-side image forming apparatus as set forth in Claim 14, wherein:

the first sheet detection means is located at an immediate upstream of the resist roller,

the first sheet detection means stopping the resist roller in a predetermined timing, if the first sheet detection means detects that a sheet is passing at the immediate upstream of the resist roller while another sheet is being transferred in the overall sheet-transferring path.

16. (Currently amended) ~~he~~ The two-side image forming apparatus as set forth in Claim 15, wherein:

the second sheet detection means stops a sheet that the second sheet detection means detects, if the second sheet detection means detects the sheet is passing in the second sheet-transferring path; and

rotation of the resist roller and transfer of the sheet in the second sheet-transferring path are resumed in a predetermined timing, when both of the first sheet detection means and the second sheet detection means detect sheets.

17. (Previously Presented) A two-side image forming apparatus comprising:

a first sheet-transferring path, for use in one-side image formation, for transferring, to a printed sheet storage section via an image transcribing section, a sheet supplied from an unprinted sheet storage section;

a second sheet-transferring path, connected to the first sheet-transferring path, for supplying a turned-over one-side printed sheet to the image transcribing section,

an intermediate roller provided along the second sheet-transferring path;

a resist roller for synchronizing a timing at which a sheet is transferred onto the first sheet-transferring path, wherein

the two-image forming apparatus is controlled such that a plurality of sheets are transferred concurrently in an overall sheet-transferring path when performing two-side image forming operation, the overall sheet-transferring path including the first sheet-transferring path and the second sheet-transferring path, and

a rotation of the intermediate roller is in synchronism with a resumption of rotation of the resist roller; and

second sheet detection means in the second sheet-transferring path, the second sheet detection means for detecting the one-side printed sheet transferred into the second sheet-transferring path,

the two-side image forming apparatus (i) stopping the one-side printed sheet that is detected, when the second sheet detection means detects the one-side printed sheet, and (ii) resuming transfer of the one-side printed sheet in a predetermined timing.